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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,395	09/27/2006	Rudolfus Antonius Van Benthem	4662-322	9280
23117 7590 01/08/2009 NIXON & VANDERHYE, PC 901 NORTH GLEBE ROAD, 11TH FLOOR ARLINGTON, VA 22203				
EXAMINER				
WEDDLE, ALEXANDER MARION				
ART UNIT		PAPER NUMBER		
1792				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/594,395

Applicant(s)

VAN BENTHEM ET AL.

Examiner

ALEXANDER WEDDLE

Art Unit

1792

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/US)
Paper No(s)/Mail Date 09/27/2006
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "Method for Applying onto a Substrate a Layer Comprising Melamine-Formaldehyde Resin"

Claim Objections

2. Claim 1 is objected to because of the following informalities: in step d), line 7, "formaldehycJe" should be changed to "formaldehyde." Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 6 provides for the use of the coated substrate of Claim 5, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 6 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Chou (US 6,159,331).

With regard to claims 1-3, Chou (US'331) teaches a method for coating a substrate, comprising the steps of applying to a substrate a layer from a dispersion ("solution") comprising melamine-formaldehyde resin ("bridging agent"), placing the coated substrate in a press, and increasing and maintaining the pressure in the press for a period of time (Claim 1, col. 16, lines 42-55; col. 7, lines 37-38). The layer does not comprise a carrier (col. 7, lines 19-21).

US'331 thus discloses every limitation of Claims 1-3 either expressly or inherently.

8. Claims 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Chou (US 6,159,331).

With regard to claim 5, Claim 5 claims a product-by-process. US'331 teaches a coated substrate, wherein all limitations of the substrate are found in the substrate produced by the process (col. 7, lines 38-39).

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In *re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted).

With regard to Claim 6, US'331 teaches the use of the coated substrate according to claim 5 in a post-forming process (col. 3, lines 52-55).

US'331 thus discloses every limitation of Claims 5 and 6 either expressly or inherently.

9. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Kosaka et al. (US 4,630,079).

Kosaka (US'079) teaches a dispersion of liquid or solid melamine-formaldehyde resin particles in a liquid, whereby the dispersion contains a dispersant which comprises a styrene maleic anhydride copolymer (Example 1, col. 5, lines 32-48).

US'079 thus discloses every limitation of Claim 7 either expressly or inherently.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining

obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chou (US 6,159,331) in view of Sato et al. (US 2003/0170414).

Regarding Claim 4, US'331 further discloses that an unsaturated polyester and N,N-diallyl melamine ("DAM") may be used to form a melamine-polyester hybrid resin bridging agent (col. 2, lines 53-62). The unsaturated polyester may be formed as the

reaction product of a glycol and the anhydride of an unsaturated dicarboxylic acid, such as maleic anhydride (col. 2, line 63 through col. 3, line 9).

US'331 is silent as to a styrene-maleic anhydride copolymer dispersant. Sato et al. (US'414) teach a method for coating a substrate, comprising a composite thermosensitive recording sheet 10 formed by lamination on an adhesive layer 20 (Fig. 1; pars. 0046-0052). A protective layer may be applied to the thermosensitive recording layer to improve chemical resistance, wear resistance, surface resistance, and transparency (par. 0179). The protective layer may comprise a water-soluble resin, such as styrene-maleic anhydride copolymer or melamine-formaldehyde resin. It would have been obvious to a person of ordinary skill in the art at the time of invention to modify the process of US'331 by dispersing the melamine-formaldehyde resin dispersion taught by US'331 in styrene-maleic anhydride copolymer dispersant, because US'414 teaches that either melamine-formaldehyde resin or styrene-maleic anhydride copolymer can be used to coat a substrate with a protective coating with improved chemical resistance and appearance; such person could reasonably expect to combine the compositions to form another composition which can be used to provide a substrate with a protective coating. It is *prima facie* obvious to combine two compositions – melamine-formaldehyde resin and styrene-maleic anhydride copolymer – each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.

Claim 4 is *prima facie* obvious absent evidence to the contrary.

Conclusion

14. No Claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEXANDER WEDDLE whose telephone number is (571) 270-5346. The examiner can normally be reached on Monday-Thursday, 7:30 AM - 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Kornakov can be reached on (571)272-1303. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. W./
Examiner, Art Unit 1792
/Michael Kornakov/

Application/Control Number: 10/594,395

Page 8

Art Unit: 1792

Supervisory Patent Examiner, Art Unit 1792